

**THE STUDY OF GROUNDWATER TO COMPLIANCE PETANAHAN
BEACH RESORT NEEDS IN KARANGGADUNG VILLAGE, SUB
PETANAHAN, KEBUMEN DISTRICT,
PROVINCE OF CENTRAL JAVA**

ABSTRACT

This study investigated the problem of groundwater potential and the amount of usage for clean water. Increased tourism activities and domestic activities of the population has consequences on the use of the groundwater is increasing. Increased tourism supporting facilities in Petanahan tourism region such as swimming pools, public toilets and stalls, as well as population growth around the tourist sites will reduce the potential content of the groundwater. This study aims to determine the amount of potential and the safe use of groundwater as well as to know type of the benefit and the number of tourists and residents use groundwater in the area of Sand Dunes Petanahan Beach in Karanggadung Village, Sub Petanahan, Kebumen District. Groundwater reserves in the area of sand dunes are not many, so that when taken continuously will cause degradation of groundwater quantity and quality.

The method used in this study on the quantity of groundwater in the Petanahan Beach area are surveying method, mapping and questionnaires are then analyzed and evaluated evaluated by making match calculations.

Groundwater reserves at this study site is divided into two, including the dynamic reserve $4.494.106,8 \text{ m}^3$ and static reverse 324.940 m^3 . The safe use of groundwater result is $8.355,78 \text{ m}^3/\text{year}$. Total use of groundwater at this study site $26205.355 \text{ m}^3 / \text{year}$ consist of the use of water for domestic resident $5.540,4 \text{ m}^3$ and tourism $20.664, 94 \text{ m}^3$.

Key words: Groundwater, Sand dunes, Groundwater reserves